Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Application of Verizon New Jersey, Inc.,)	
et al, For Authorization to Provide)	
In-Region, InterLATA Services)	CC Docket No. 01-347
in New Jersey)	
)	

DECLARATION OF CHRIS FRENTRUP ON BEHALF OF WORLDCOM, INC.

Based on my personal knowledge and on information learned in the course of my duties, I, Chris Frentrup, declare as follows:

I. INTRODUCTION AND SUMMARY

- 1. My name is Chris Frentrup. I am employed by WorldCom, Inc.

 ("WorldCom") as a Senior Economist in the Public Policy Analysis Group of the Federal

 Advocacy organization. In that position, I am responsible for analyzing economic issues relating to telecommunications industry regulation and public policy, and assisting in the development and advocacy of WorldCom's public policy positions. I have participated in the development and advocacy of the HAI Model, a model used to estimate telecommunications network costs. I also have worked extensively on the assessment of local exchange carrier productivity in the Commission's price cap proceedings.
- 2. The purpose of my Declaration is to demonstrate that Verizon's current unbundled switching rates in New Jersey are not based on total element long run incremental cost ("TELRIC"), despite Verizon's claims to the contrary in its recently filed section 271

application. <u>See</u> Verizon-New Jersey Brief at 3. In addition, I will show that some of the inputs used to set Verizon's loop rates are not compliant with TELRIC principles, and thus that those rates are also excessive

- 3. Concerning switching rates, Verizon made errors in both inputs and methodology that overstated rates. Verizon used only the minutes for the peak usage days to determine the per-minute switch usage rates. Because this methodology excludes weekend and holiday usage, it results in excessive usage rates. Making the conservative assumption that daily usage on these off-peak days would be half the daily usage on the peak days would lower the switch usage rates by 18.5 percent.
- 4. This overstatement of switch usage rates is exacerbated by the inclusion of the cost of vertical features in the switch usage rather than the port rate. Recovering these non-traffic sensitive costs in the per-minute switch usage rates further increases competitions' costs. Verizon should be required to recover the vertical features cost in the port charge, and either increase the minutes to reflect usage on all 365 days of the year, or provide usage at a rate of zero for the off-peak days. In addition, Verizon should not be permitted to charge two switching charges for an intra-switch call.
- 5. Finally, in its development of both port and switch usage rates, Verizon uses a discount for the cost of switches that reflects 79.4 percent new switches and 20.6 percent growth switches. Since the growth switch discount is lower than the new switch discount, this results in overstated switch costs.
- 6. In addition to these problems with its switching rates, Verizon uses several inputs in setting its loop rates that are inconsistent with TELRIC principles. These inputs include an assumed level of use of fiber in the feeder without consideration of the relative costs

of fiber and copper, and low fill factors. Use of these unreasonable inputs inflates the loop rates.

- 7. It is not possible to quantify precisely the effect of these input problems because, as in its previous section 271 applications, Verizon has not submitted its cost models on the record in this proceeding. Without access to these models, interested parties are limited in their ability to assess the effect of input changes.
- 8. As demonstrated in the declaration of Vijetha Huffman, Verizon's excessive UNE rates place potential competitors in a price squeeze for the provision of local service. As the U.S. Court of Appeals for the District of Columbia Circuit recently determined, this price squeeze raises the issue of whether these rates are in the public interest. Given this price squeeze, the Commission must determine whether the rates must be at the lower end of the range of reasonableness.
- 9. Finally, although the New Jersey switching rates are below the existing high rates in New York and Massachusetts, the rates in New Jersey are above the rates contained in the Administrative Law Judge's ("ALJ's") recommended decision currently before the New York Public Service Commission, which substantially cuts the unbundled network element ("UNE") rates in New York. Even after allowing for cost difference between New York and New Jersey, the New Jersey switching rates are higher than the ALJ-recommended rates for New York. The Commission should reject Verizon's application until Verizon corrects its rates as described herein.

II. VERIZON'S INPUTS AND METHODOLOGY INFLATE SWITCHING RATES

10. Verizon set its switching rates by determining the cost of the port and usage portions of the switch, and then dividing these two costs by forecasts of port and minute

demand. However, Verizon overestimated the switch costs and underestimated demand, which resulted in inflated port and usage rates.

- 11. Verizon uses an incorrect methodology for determining the number of switching minutes. Verizon determines the size of the switches needed based on peak usage for the switches. It then applies a busy hour to total usage ratio to determine the total minutes that are divided into the switch cost to determine the switch rate. However, after obtaining the average daily usage in this manner, Verizon then multiplies that usage by only 251 days, that being the number of weekdays, less holidays, in a year. This methodology for determining the number of minutes in a year effectively assumes that there are no minutes of calling on the weekends or on holidays. This is absurd.
- 12. Even the very conservative assumption that usage on these non-peak days is only half the level of usage on peak days implies that the switch usage rates should be 18.5 percent lower. Using only peak minutes to set switching rates is a clear violation of the TELRIC methodology, which requires that all usage be considered in determining rates. The Commission should require Verizon to correct this clear error by reducing Verizon's switch usage rates to reflect usage on all days, or alternatively to offer switching usage at a zero rate in off-peak periods, before it grants section 271 authority to Verizon.
- 13. This overstatement of switch usage rates is exacerbated by the inclusion of the cost of vertical features in the switch usage rates rather than the port rate. Despite the fact that the cost of vertical features does not vary by usage, Verizon recovers those costs in the per minute switch usage rates. This increases the cost in the usage portion of the switch, which is

¹ There are 365 days in a year. Subtracting the 251 days that Verizon uses yields 114 days. At a level of usage one-half the level of peak usage days, these days are the equivalent of 57 peak days. Adding this to the 251 days, dividing that sum into 251 days, and multiplying the result by the existing switch usage rates yields a net decrease in

divided by the understated peak minutes, further inflating the switch usage rate. Verizon should be required to recover the vertical features cost in the port charge.

- 14. Having overstated the switch usage rate in this manner, Verizon further raises CLEC costs by imposing this inflated switching rate twice for intra-switch calls, even though an intra-switch call passes through the switch only once. This "double-charging " was explicitly rejected by the New York and Massachusetts commissions, and should be rejected for New Jersey as well.
- 15. In addition to making these errors in setting and applying the switching rates, Verizon overstated its switching costs by setting its switching rates using an inappropriate discount off of the list price for the switch. The New Jersey Board of Public Utilities directed Verizon to compute its switching costs as if 79.4 percent of the switches would receive the discount for purchases of new switches and the other 20.6 percent would receive the discount for purchases of growth switches. In the federal Universal Service proceeding, the Commission determined that the appropriate discount for TELRIC purposes was the discount for purchases of 100 percent new switches.²
- 16. Use of this mix of new and growth discounts raises the cost of switching both port and usage above the level that would result from using only the new switch discount. Using only the new switch discount would reduce the switch usage and port rates closer to a level that would allow competitors to enter, but the reduction cannot be computed without the cost models and data that Verizon has failed to provide.

III. VERIZON'S SWITCHING RATES ARE ABOVE THE ALJ-RECOMMEND RATES IN NEW YORK

the rates of 18.5 percent.

^{2 &}lt;u>See</u> Federal-State Joint Board on Universal Service and Forward-Looking Mechanisms for High Cost Support for Non-Rural LECs, CC Docket Nos. 96-45, 97-160, Tenth Report & Order, 14 FCC CD 20156 (1999) at ¶ 317.

Massachusetts and New York, even after allowing for the cost differences among those states as identified by the Synthesis Model. However, Verizon does not discuss the relationship of the New Jersey rates to the pending rates recommended by the ALJ in New York. The New Jersey rates are approximately 30 percent above those recommended rates. According to the Synthesis Model, New Jersey switching costs are about 3 percent below New York rates.³ Thus, the New Jersey switching rates are well above the rates recommended by the ALJ in New York, even after adjusting for cost differences between the two states.

IV. THE INPUTS USED TO SET VERIZON'S LOOP RATES RESULT IN RATES THAT ARE OVERSTATED

- 18. In addition to the problems identified with the switching costs <u>supra</u>, there are a number of problems with the inputs used to determine loop rates. As was the case with the switching rates, it is not possible to quantify the effect on loop rates of correcting these inputs, because Verizon has not provided in its section 271 filing the cost models used to develop loop rates. However, it is clear that these changes would lower loop costs. Until these changes are implemented, Verizon's loop rates remain above TELRIC levels.
- 19. First, Verizon assumes that 60 percent of feeder is served on fiber cable with integrated digital loop carrier ("DLC"), with the remaining 40 percent served on copper. These percentages are inputs to the cost model, rather than derived as the result of cost optimization. While the use of fiber feeder is often the lowest cost, most efficient forward-looking technology, in some cases, primarily those situations in which customers are located

³ Verizon claims that Synthesis Model costs in New York are about 12 percent below New Jersey costs. <u>See</u> Joint Declaration of Patrick A. Garzillo and Marsha S. Prosini at 16. This is true only of the costs that are associated with the switch port. The switch usage cost is about 14 percent higher in New York than in New Jersey. Costs for usage

close to the central office, copper feeder may be cheaper. For example, the Commission's Synthesis Model, which set the amount of copper and fiber feeder based on a cost optimization routine, resulted in only about 30 percent fiber feeder in the state of New Jersey. Thus, the amount of fiber feeder used in Verizon's loop cost model appears to result in higher costs.

- 20. Similarly, Verizon uses fill factors for fiber and copper cable that are unreasonably low, resulting in overstated loop costs. For distribution cable, Verizon assumes a 53 percent fill factor. By contrast, the Synthesis Model used a higher fill factor in all but the lowest (0 to 5 lines per square mile) density zone. In the four highest zones (all zones with more than 850 lines per square mile⁴), the Synthesis Model assumed a 75 percent cable fill. Verizon assumed a copper feeder fill factor of 75 percent, which was lower than the fill factor in the Synthesis Model for all but the lowest density zone. For the six densest zones (more than 200 lines per square mile⁵), the Synthesis Model assumed a copper feeder fill of 82.5 percent. Finally, Verizon assumed a 77.5 percent fill factor for fiber feeder, compared to the 100 percent fill assumed in all zones in the Synthesis Model. These low fill factors require the use of larger cable sizes than are necessary, and thereby inflate loop costs.
- 21. As in the case of the switching rates, we have not been provided access in this proceeding to the cost models or inputs used to set the loop rates. Without this information, we are unable to quantify the effect of changing these inputs. However, it is certain that correcting these errors would lower loop rates.

IV. CONCLUSION

and port combined are about 3 percent higher in New York than in New Jersey.

⁴ This is equal to an average lot size of approximately three quarters of an acre. Thus, these highest density zones include all suburban and urban zones.

⁵ This is equal to an average lot size of approximately 3.25 acres. Density zones above this density would encompass all urban, suburban, and many rural areas.

- 22. Verizon's switching and loop UNE rates exceed TELRIC levels and are not reasonable. The rates are above the level recommended by the ALJ in New York, and are based on a methodology and inputs that violate TELRIC principles. Until the methodology used to set switching rates is corrected, as well as the inputs used to set both switching and loop rates, the Commission should reject Verizon's section 271 application.
 - 23. This concludes my Declaration on behalf of WorldCom.

WorldCom Comments,	January	14, 200	2, Veri	zon New	Jersey	271
			F	rentrup	Declara	ition

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 14, 2002.
Chris Frentrup